

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/698,034	YVIN ET AL.	
	Examiner Brandon J. Fetterolf, PhD	Art Unit 1642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 11/24/2004.
2.  The allowed claim(s) is/are 1,2 and 5-11.
3.  The drawings filed on 30 October 2003 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of  
Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                 | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____. | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material           | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|  | 9. <input type="checkbox"/> Other _____.   |

Yvin *et al.*  
Date of Priority: 10/30/2003

## EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with B. Aaron Schulman on March 18, 2005.

The **specification** on page 9, line 23 has been amended as follows:

### Brief Description of Drawings

Figure 1 demonstrates the effect of administration of Pycarine® on tumor growth. Group 1 represents the control. Group 2 represents Herceptin 0.5mg/kg; Group 3 represents Phycarine® 250mg/kg; Group 4 represents Phycarine® 250 mg/kg and Herceptin 0.5mg/kg; Group 5 represents Phycarine® 500mg/kg and Herceptin 0.5mg/kg; Group 6 represents Paclitaxel (Mead Johnson) 16mg/kg.

The **claims** have been amended as follows:

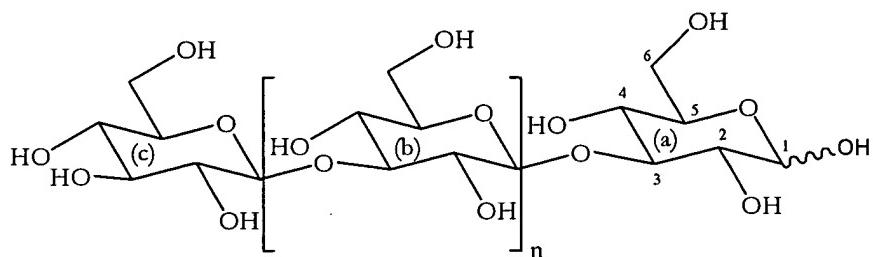
Claim 1. (Currently Amended) A therapeutical method comprising administration of a composition comprising a monoclonal antibody with either a ~~□~~ (1,3)-glucan-like laminarin or an oligo- $\beta$ -(1,3)-glucan and a pharmaceutically acceptable carrier, to a human being or to a warm-blooded animal suffering from breast cancer in an amount which is effective to treat the breast cancer, wherein the monoclonal antibody is any monoclonal antibody specific to molecular determinants present on breast cancer cells and simultaneously able to activate complement.

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Claim 3. (Cancelled) The method according to claim 2, wherein the monoclonal antibody is any monoclonal antibody specific to molecular determinants present on cancer cells and simultaneously able to activate complement:

Claim 4. (Cancelled) The method according to claim 1, wherein the cancer is leukemia, adenocarcinomas, breast cancer, lung cancer, ovarian cancer, oesophagus cancer, gastric cancer, intestinal cancer, non-Hodgkin lymphoma or colon cancer

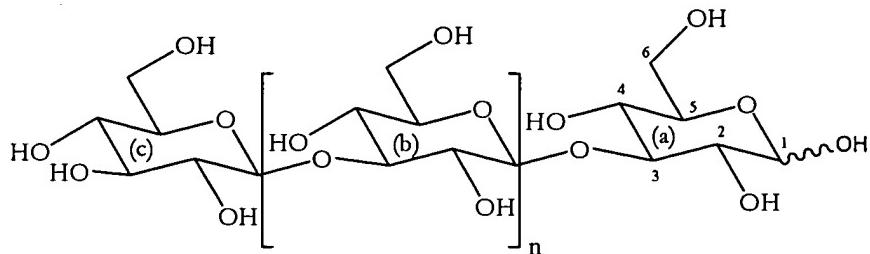
Claim 8. (Currently Amended) A pharmaceutical Pharmaceutical composition under the form of an injection, ointment, pulmonary spray comprising a therapeutically effective amount of a monoclonal antibody and either a  $\beta$ -(1,3)-glucan or an oligo- $\beta$ -(1,3)-glucan or formula (1)



in which  $n=1$  to  $10$ , preferably  $n=2$  or  $n=3$ ,  
or a salt pharmaceutically acceptable salt thereof,  
and a pharmaceutical acceptable carrier,  
said composition being free of any other glucan.

Claim 9. (Currently Amended) A pharmaceutical Pharmaceutical composition according to claim 98, further comprising a chemotherapeutic agent.

Claim 11. (Currently Amended) A pharmaceutical Pharmaceutical composition under the form of an injection, ointment, pulmonary spray comprising a therapeutically effective amount of a monoclonal antibody and an oligo- $\beta$ -(1,3)-glucan or formula (1)



in which n=2 or n=3,  
 or a salt pharmaceutically acceptable salt thereof,  
 and a pharmaceutical acceptable carrier,  
 said composition being free of any other glucan.

### ***Conclusion***

Claims 1-2 and 5-11 are allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Fetterolf, PhD whose telephone number is (571)-272-2919. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Siew can be reached on 571-272-0787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brandon J Fetterolf, PhD  
 Examiner  
 Art Unit 1642

*Jeffrey Siew*  
**JEFFREY SIEW**  
 SUPERVISORY PATENT EXAMINER  
 3/21/05